

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB 03/02701

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 B01J23/22 B01J27/20 B01J23/75 B01J23/755

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 608 359 A (FIATO ROCCO A ET AL) 26 August 1986 (1986-08-26) column 3, line 9 - column 6, line 47; claims; examples; tables ---	1-17
X	US 4 559 365 A (FIATO ROCCO A ET AL) 17 December 1985 (1985-12-17) the whole document ---	1-17
A	US 2 230 267 A (SAMUEL RUBEN) 4 February 1941 (1941-02-04) the whole document ---	
X	US 4 113 658 A (GEUS JOHN W) 12 September 1978 (1978-09-12) column 10, line 42 - line 65 column 14, line 39 - line 44; claims; figures; examples; tables ---	1-17
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

4 December 2003

Date of mailing of the international search report

18 DEC. 2003

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 853 791 A (FEINS I) 10 December 1974 (1974-12-10) column 3, line 35 - line 49 column 7, line 4 - line 30; claims; examples; tables ---	1-17
X	US 4 522 940 A (SAMBROOK RODNEY M ET AL) 11 June 1985 (1985-06-11) column 2, line 50 -column 3, line 25; claims; examples; tables ---	1-17
X	US 4 469 815 A (SAMBROOK RODNEY M ET AL) 4 September 1984 (1984-09-04) column 2, line 15 - line 40 column 3, line 37 -column 56; claims; examples; tables -----	1-17

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national application No.  
PCT/GB 03/02701

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:  
1-17 (partially)
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: claims 1 - 17 (partially : in as far as they relate to the incorporation of V, Cr, Mn, Fe or Cu)

process for preparing a supported catalyst or catalyst precursor containing carbon, further comprising a V, Cr, Mn, Fe or Cu-containing compound; and a process for carrying out a F-T synthesis, hydrotreating, hydrocarbon partial oxidation, steam reforming or carbon dioxide reforming reaction with a catalyst prepared by said preparation process.

2. Claims: claims 1 - 17 (partially : in as far as they relate to the incorporation of Mo or W)

process for preparing a supported catalyst or catalyst precursor containing carbon, further comprising a Mo- or W-containing compound; and a process for carrying out a F-T synthesis, hydrotreating, hydrocarbon partial oxidation, steam reforming or carbon dioxide reforming reaction with a catalyst prepared by said preparation process.

3. Claims: claims 1 - 17 (partially : in as far as they relate to the incorporation of Co and/or Ni),  
19 (partially : without a promotor)

process for preparing a supported catalyst or catalyst precursor containing carbon, further comprising a Co and/or Ni-containing compound; and a process for carrying out a F-T synthesis, hydrotreating, hydrocarbon partial oxidation, steam reforming or carbon dioxide reforming reaction with a catalyst prepared by said preparation process.

4. Claims: claims 1 - 17 (partially : in as far as they relate to the incorporation of Co and/or Ni),  
18 and 19

a supported catalyst or catalyst precursor containing carbon, further comprising a Co and/or Ni-containing compound and additionally comprising a promotor compound; a process for preparing a said catalyst or catalyst precursor ; and a process for carrying out a F-T synthesis, hydrotreating, hydrocarbon partial oxidation, steam reforming or carbon dioxide reforming reaction with a catalyst prepared by said preparation process.

International Application No. PCT/GB 03 02701

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 03/02701

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4608359	A	26-08-1986	US 4559365 A CA 1250566 A1 DE 3561687 D1 DE 170408 T1 EP 0170408 A1 JP 1060295 B JP 1575562 C JP 61050641 A	17-12-1985 28-02-1989 07-04-1988 12-06-1986 05-02-1986 21-12-1989 24-08-1990 12-03-1986
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